WEALTH, DEBT AND TAXATION.

Valuation and Taxation.

The report of the census of 1890 on Wealth, Debt and Taxation consists of two parts: Part I—Public Debt; Part II—Valuation and Taxation. This review covers the second part.

General Introduction.—As the heading—Valuation and Taxation—implies, there are two distinct purposes served by this part of the census. One purpose is to obtain a general inventory of the wealth of the nation; the other is to ascertain the sources and amounts of the income of the commonwealth and local governments,[1] and to show the character of the charges upon that income.

Prior to 1880, there was no distinct recognition in the census investigations of the second purpose. Attempts were made in 1850, in 1860 and in 1870 to estimate the amount of wealth in the country, and in that connection the assessment of property for purposes of taxation was ascertained. In 1880 an investigation into taxation was added to that into the assessed valuation of property and the second of the two purposes was for the first time clearly recognized.

Although these two purposes are entirely distinct in character, yet their original combination and the somewhat subordinate, contributory position which the investigation into taxation occupied at the beginning led to complications to which certain serious faults in the eleventh census (1890) can be traced. This unfortu-

[1] States and territories, including the District of Columbia, and all political subdivisions or parts thereof, which raise or expend public revenues.

nate combination arose very naturally. A large proportion of the revenues of the state and local governments was, and still is, raised by the taxation of property, and it is still the common assumption that all property is taxable and is, or should be, assessed. This assumption, which is not at all warranted by the facts, was made in the seventh census and again in the eighth census.[1] It was but slightly modified in the ninth census and did not altogether disappear in the tenth or eleventh. In the first two reports, both of which aimed to find the amount of our national wealth, the assessed value of property taxed was ascertained and to that certain amounts were added to make the "true value." Property exempt or which escaped taxation was not considered until the ninth census. At that time there was added to the estimated "true value" of property taxed a certain sum supposed to cover the value of property exempt from taxation or which escaped by fraudulent evasion. In 1880 and in 1890 the attempt was made to make a complete inventory of national wealth, and in this connection the assessed valuation of property taxed was used as a guide in obtaining the value of certain kinds of property. At the same time the investigation concerning assessment and taxation was greatly developed in scope and accuracy. Each of these two parts of the investigation having thus had its development, it is easy to see that they have really separated. Still the traditions of the old combination cling to the investigation, affecting its terminology, its methods, the presentation of its results, and the comparisons drawn from it, and give to it many features the presence of which cannot be explained except as historical accidents. Thus,

[1] Special report of the superintendent of the seventh census, Dec. 1, 1852. Eighth Census, Miscellaneous Statistics, 294.

the terms, "assessed valuation" and "true valuation," formerly represented two ways of looking at the same thing, namely, the property taxed. But, though the term "true valuation" is still used, it applies in the eleventh census to all kinds of property, taxed and untaxed. Yet in spite of that change the new "true valuation" is freely compared with the old as if both referred to the same thing. Thus we are told, for example, that the total wealth of the country in 1890 was $65,000,000,000, or $1,036 per capita. This is then compared with $7,000,000,000, or $308 per capita in 1850. But the $7,000,000,000 represents the corrected value of property taxed, while the $65,000,000,000, ostensibly at least, includes all property, taxed and untaxed, alike. The comparison is then elaborated and extended, percentages of increase, etc., being offered.

Other comparisons, which were perfectly logical when first instituted, have become illogical and inadmissible through the changes which have been made, but are yet continued. Of these the following will serve as an example. In 1860 we were told that the "assessed valuation" of property taxed was $12,000,000,000 its "true valuation" being $16,000,000,000, a perfectly proper comparison. But in 1890, we were told that the "assessed valuation" of the property taxed is $25,000,000,000, and that the "true valuation" of this property together with a large amount of other kinds of property was $65,000,000,000, and further that the "assessed valuation" is 40 per cent of the "true valuation." The most natural inference is that the assessors had decreased their assessments from 75 per cent to 40 per cent in 30 years, an inference which is not at all near the truth.

It is time that the two purposes of this part of the in-

vestigation should be recognized as entirely distinct. Old and no longer admissible comparisons should be discontinued and the foundation laid for new and permanent comparisons, which may be continued in the future with ever increasing value. It may be said in defense of the census of 1890, against the criticisms just offered that the reader is warned against the error of such comparisons by the preliminary explanatory statements. This is quite true, and the warning is good as far as it goes. But in the presentation of the results of a public statistical investigation two things must be borne in mind. (1) Many unscientific persons will necessarily take the tables verbatim; and will use them "uninterpreted" and unmodified by any explanatory statements; and hence, no table or statement should be printed which taken in that naïve, simple way will lead to serious error. To drop the old comparisons, altogether, is, therefore, better than to continue them in such a misleading form. (2) Scientific investigators, who use the census, will need to "interpret" the figures given, in order to make new combinations, and for them the most ample and detailed explanations of methods and significance are indispensable. Indeed one of the most troublesome features of the volume on Valuation and Taxation now under discussion is the inadequacy and obscurity of the statements given regarding the methods by which the figures were obtained and their real meaning. Many instances in which the census of 1890 failed in this respect will be found in the following attempt to analyze the figures given.

I. THE WEALTH OF THE NATION.

The purpose of this part of the investigation is quite clearly indicated when we call it our national inventory.

The information sought is the value of all the different kinds of tangible wealth within our boundaries at the close of the census period, 1890.[1] Of necessity the larger part of this investigation must be made by what the statistician would call an enquête, that is, a careful expert estimate. Enumeration is possible only in a few of the items.

At this point the question might be raised whether such estimates of wealth in general are of any scientific use. The trained statistician naturally looks with considerable suspicion upon an aggregate composed of so many complex elements, each measured by a different plan and on a different scale. He will be extremely wary of drawing any conclusions from it without a careful study of the methods by which the figures were obtained and considerable readjustment of the statements. But the layman frequently accepts the census estimate of wealth, and especially that conglomerate total, as an accurate measure of national prosperity, and draws conclusions of varying accuracy. This review is not the place for an extended discussion of the "relations between private property and public welfare."[2] It is sufficient to recall the fact, so often dwelt upon by economists, that national well-being or prosperity depends upon a great many other things than the accumulated possessions of the people. It depends quite as much upon many of the "free gifts of nature" as upon those things to which we ascribe a value. It depends

[1] The phrase "at the close of the census period, 1890," appears to mean May 31, 1890. No more definite statement of the date to which the investigation refers is given in connection with the estimate of wealth. There is some internal evidence that all parts of the estimate were not scrupulously reduced to that date. Since, however, the entire inventory is at best an approximate estimate, it would, perhaps, be over-critical to insist on the reduction of all parts to the same date.

[2] A. T. Hadley, Economics, Subtitle.

very much upon the abundance and consequent cheapness of things, and upon the uses to which our accumulated possessions are put. At times, national well-being increases with the increase of circumstances which tend to lower the value we put upon accumulated possessions. An increase in the number of dollars' worth of goods on hand, or in the number of dollars' worth of land, unaccompanied by a material increase in the amount of goods or the area of land under cultivation is frequently a sign of the increasing hardship of economic life. "Public wealth," says Hadley, "is a flow, not a fund; it is to be measured as income, not as capital." It must, therefore, be clear that the census estimate of wealth cannot give us an accurate measure of national well-being.

Yet the inventory has its use, even if it does not measure the "Wealth of the Nation" in the broadest sense of that phrase. The grand total may be a meaningless conglomerate, but the items in the list have each a definite significance. Indeed, the national inventory has about the same use which a merchant's annual inventory has. Although the total amount of stock on hand has no significance as to the profitableness of the business, and although the merchant reckons his success by the size of his profit, not by the size of his stock, yet he wants to know the relative amount of each kind of goods, the adequacy of the supply as related to the possible demand, the proportion of dead stock, etc., etc. So the economist is interested to know the relative amount of each of the different kinds of wealth. From this point of view the investigation has its importance and there can be no question of the wisdom of continuing this part of the census.

If this view of the scientific purpose of the inventory of wealth be correct, it has certain consequences which

are important in their bearing upon the method of the investigation and upon the presentation of the results. These consequences, briefly stated, are (1) that a correct classification is very important; (2) that each item must be estimated in a way to show its relations to the others; (3) that the results must be so presented that the reader can understand the real significance of each class of wealth.

In taking up the census estimate of wealth the first thing we are interested in, therefore, is the classification used. This was determined in 1890, mainly by the exigencies of collecting the data, which, in turn, were determined by the desire to utilize the results of other investigations throwing light on the subject. The information obtained from these other investigations was not systematized and rearranged according to some logical classification or plan, but carried over bodily, as it were, and the parts roughly patched together. The other investigations made use of were:

1. The census investigation into manufactures, especially that part of it dealing with the capital invested, the value of machinery in mills, and of the product on hand.

2. The census investigation into transportation by land and water, especially that part concerned with the value of railroads and shipping.

3. The census report on mineral industries from which the value of mines and quarries with product on hand was taken.

4. Much valuable assistance might have been obtained from the census investigation into farms, homes, and mortgages, and apparently some was so obtained. Indeed if the investigation into "Wealth" had been combined with that one, many of the items which were

merely "estimated" could have been enumerated and additional details obtained. But it will be remembered that the investigation into farms, homes, and mortgages was ordered after the regular work had been planned, and when it was too late to take advantage of the opportunity thus afforded.

Other government reports and investigations were of assistance, especially the report of the Director of the Mint for 1890, which gave the value of gold and silver coin and bullion.

The rest of the data seem to have been collected or estimated, especially for this report. The general classification is as follows.

1. Real estate, with improvements thereon	39,544,544,333
2. Live stock on farms, farm implements, and machinery	2,703,015,040
3. Mines and quarries, including product on hand	1,291,291,579
4. Gold and silver coin and bullion	1,158,774,948
5. Machinery of mills and product on hand, raw and manufactured	3,058,593,441
6. Railroads and equipment including $389,357,289 for street railroads	8,685,407,323
7. Telegraphs, telephones, shipping, canals, and equipment	701,755,712
8. Miscellaneous	7,893,708,821
Total	$65,037,091,197

Is this classification sufficient? Do these items include all the wealth of the country? These questions are rather difficult to answer. So entirely have the exigencies of collection been allowed to rule the classification that it appears totally irregular and illogical. It is almost impossible to say whether all kinds of wealth have been included or not, still less is it possible to say exactly where certain kinds of property belong if they are included. The critical reader is not particularly reassured by the confident statement of the Census

Office that "these items include substantially all the wealth of the country." A few rather important instances have been noted which seem to throw a doubt on the accuracy of this statement. Thus, for example, no special mention is made of electric light and power plants, nor of gas plants in private hands or belonging to corporations. An examination of the details shows that probably some of the real estate of such corporations is included under the head of real estate. This is true of all those states where the corporations are taxed on their property. The machinery of such companies is probably included in the machinery of mills, but the poles, lines, cables, pipes, etc., so far as I could ascertain, are not included anywhere. There is no evidence that more than a very small part of the property of water companies, both those supplying water for household uses and for power and those supplying water for irrigation, is included. Possibly because the investigation is confined to the tangible wealth of the country, the franchises of such corporations are not included, although it is hard to see how the real wealth or earning power of these and other similar corporations, or even the value of their property, can be properly estimated without reference to the value of their franchises. Any statement of wealth which omits such important elements as the valuable rights, privileges and relations characteristic of modern industrial organization cannot be said to contain "substantially all the wealth of the country." Merchandise held in stock by merchants and producers was estimated by the tenth census at over $6,000,000,000. This item in the eleventh census is included under "miscellaneous" and given some small value which is not stated. No explanation of the change is offered.

It appears from the report that public lands, public buildings, and the personal property of governments were included in the total wealth. But the exact amount of these items is not clearly stated. If these items are to be included, one might inquire why public highways, roads, streets, bridges and the like were not included. Are they not a part of our tangible wealth? They do not appear to have been included in the list. In reference to such items as these it may be said that it is difficult to tell where to draw the line. If we include streets and roads, we should include canals; if canals, then harbors and rivers, upon which the government spends so much money. If we include these items it would seem reasonable to include a breakwater; if a breakwater, why not the shore which it shelters? It is obvious that this leads to a serious difficulty. It is probable that the only way out is to draw an arbitrary line, and to include only such items of public wealth as have been the objects of the expenditure of public funds, or been held for sale. Of the former class the public works will serve as an example, of the latter the public lands. These items have, of course, no market value and the sum at which they are to be entered in the list will be more or less arbitrary. Still it is not difficult to estimate in most cases what they would be worth if they were private property, and it would be eminently satisfactory for all purposes to enter them in the list at such a valuation.

It would serve no useful purpose to allow the criticism of the eleventh census in this particular to turn upon the claims of any or all the above items to be recognized by a place in the list of wealth. They are not cited for that purpose, and there may be others that are not mentioned, which are of more importance and better entitled to a place. All that it is necessary to point out is that

is is impossible from the results presented to tell whether the above items or any part of them have been included or not. Even if the census is not open to the charge of having omitted them, it is certainly a fault not to have explained where they are to be found, or if they have been omitted the grounds for their exclusion. The general classification is unsatisfactory even if it is not, as indeed it appears to be, incomplete.

We pass next to the methods pursued in ascertaining the amount of the different items. "The term real estate includes all lands and lots with improvements thereon, but does not include mines, quarries, telegraphs, telephones, or railroads, except that in a few states where the roadbed, station houses, and repair shops of railroads are classed as real estate for purposes of taxation and their value not separately reported."[1] To some extent therefore the items are duplicated. It is a matter for careful consideration whether this cannot be avoided or the error reduced.

The value of the real estate was ascertained by inquiry from the persons empowered to assess it for taxation, checked by "more than 25,000 inquiries sent throughout the country to persons believed to be familiar with the values of real estate, asking their opinions as to the relation between the assessed and true value in their respective localities."[2] This method does not seem to have been applied uniformly to all parts of the country. The 25,000 inquiries were sent out upon some very peculiar plan. If that were not the case, it is very remarkable, to say the least, that the true value ascertained in this way should correspond exactly to the assessed value in the case of real estate in Maine and in the District of

[1] Eleventh Census, Wealth Debt and Taxation, 2:7.

[2] *Ibid.*

Columbia. If there are two parts of the country where the assessed value is the same as the market value, it is worth the whole cost of the census to have established the fact. In Wisconsin and Pennsylvania local reports were partly utilized.[1] The results obtained in this way were then submitted to the governors of the respective states. This procedure, as might have been foreseen, resulted in eliciting no new information.

The most commendable feature about the above method is its economy. No other method could have been used without a material increase in expense. It is an attempt to do by correspondence what could be done much more satisfactorily by the special agent. A much greater degree of success might have been assured if it had been applied in a somewhat different way. A great deal depends upon the persons selected to whom the inquiries are sent. But even more depends upon the way in which the questions are presented. The persons to whom the inquiries are sent should be those who are familiar with actual sales. The questions should call for an actual list of the sale prices compared with the assessed values of pieces of land that have actually changed hands within some short period preceding the census period. The question asked in the census of 1890, "What is your estimate of the ratio or percentage which the assessed value of real estate in your town bears to its true value, viz., to the amount which it would bring at sale in open market?",[2] when unaccom-

[1] Although the true values ascertained by the Pennsylvania Tax Conference were adopted in the main yet in the case of Philadelphia the census figures vary from those of the Conference by more than $125,000,000. No explanation of this is offered, and from the text the reader is left to suppose that the figures of the Conference were simply reprinted.

[2] Circular letter of January 20, 1890. Form 7–466.

panied by a call for a statement of the facts in regard to actual sales, is but a license for guess work.

The lists of actual sales obtained in this way should then be checked by statements obtained from the courts of the valuations made by appraisers appointed to determine the value of the estates of deceased persons. For the same purpose it would be possible to use the mortgages executed within the last two years preceding the census period. From these the value could be roughly estimated by assuming that the property was mortgaged for a certain proportion of its value. If in addition to these sources of information a special agent could visit the different localities, talking with owners, real estate agents and other persons, it would be possible to arrive very closely at the true value. None of these sources of information seems to have been utilized.[1]

The sources of possible error to be guarded against are: 1st, mistakes in the judgments and statements of the persons to whom the inquiries are sent; 2nd, the omission of lands from the assessment; 3rd, differences in the definition of real estate in the different state laws. The first source is one which involves the whole theory of statistical observation and cannot be enlarged upon here.

The second error is, I am convinced, a very large one. In very few of the states are there any good and com-

[1] It has been found impossible at this late date to obtain a complete set of the schedules, etc., used in compiling these statistics. Through the kindness of Mr. King, census clerk in the Department of the Interior, as complete a set as possible was sent to me. The judgments above expressed were first formed by a study of the returns in the census, and were afterwards confirmed by an examination of blanks numbered 7–466 and 7–467. It is, however, due the Census Office that I should quote from Mr. King's letter: "Please bear in mind that it is not complete, (*i. e.*, the set of blanks) and can only be used as indicating something of the scope and manner of the inquiry: any specific subject which might be criticized from these papers might have been exactly covered by some one of those that are missing."

plete maps for the use of the assessors, and it is rare that the assessment is carefully checked by the use of maps. The assumption that all real estate is assessed is far from the truth.[1] My attention has frequently been called by assessors to the fact that they have discovered and assessed lands which had been overlooked by their predecessors. In a single county in California lands, now assessed at over $500,000, but which for years had escaped taxation, were recently discovered by the assessor. In addition to such items there is in many parts of the country, even in New England, and especially on the Pacific Coast, a considerable amount of land, known in the West as "Sobrante," that is irregularly shaped pieces of land between grants, townships and sections, not covered by the descriptions in the surveys. The correction of this error is far beyond the power of the Census Office. It will have to await the completion of more adequate surveys.

The third source of error, namely the differences in the definitions of real estate for assessment purposes, is most complex and difficult to deal with. It can, however, be avoided by a careful comparison of the laws of the different states and by reductions and readjustments according to some uniform plan. The Census Office itself should draw up a simple and clear definition of real estate and follow that uniformly, changing the local definitions to conform thereto. The principal difficulty here, namely, the classification of possessory claims as personal property, will be discussed below in connection with taxation.[2]

[1] Even the total area of the country is not definitely known. Compare in this connection the very interesting discussion of the Area of the United States by W. F. Willcox. Am. Econ. Assn. *Studies* 2 : 211–228.

[2] See pp. 400,ff.

The conclusion is that the method used by the eleventh census to obtain the value of real estate was defective in several particulars. It depended too much upon opinion, and many facts which would have aided in making the estimate were not collected. If for reasons of economy it is found impossible to employ special agents to ascertain the value of real estate, a far more satisfactory result could have been obtained by the method suggested above.

"No attempt has been made to ascertain the value of improvements separate from that of lands, or of city or town lots separate from other lands measured by acres, as the state reports do not generally make such divisions, and original investigations as to land values have not been instituted by this office."[1]

The idea here expressed, that since it is not always feasible to ascertain the assessed value of improvements separately, it is not worth while to ascertain the true value of improvements apart from the land, is an inheritance from the time when the two purposes of the investigation above stated were combined. There are many items in the above list, the separate assessed value of which could not be learned, and these were nevertheless wisely segregated. Moreover, it would be possible in most parts of the country to ascertain the value of improvements separately. The investigation into farms and homes could easily have been extended so as to show the relative value of town lots as compared with lands measured by the acre. In many states, building contracts are a matter of record and with these it is possible to ascertain the value of improvements especially in cities.[2] It would be extremely useful to know this item separately.

[1] Eleventh Census, Wealth, Debt, and Taxation, 2:7.

[2] For application of this method see Illinois Bureau of Labor Sta-

"The value of mines and quarries, including product on hand, is the capital invested in these enterprises, as shown by the Report on Mineral Industries for the Eleventh Census. It does not represent the amount of capital stock issued, but is the actual investment in the land, buildings, fixtures, tools, implements, live stock machinery, etc., including in some cases a small amount of cash on hand, which was not reported separately and could not therefore be eliminated. The commercial value of the mines varies from day to day, but it is thought, as only mines are included which appear to be yielding more or less product, that their average commercial value would be at least the amount of capital actually invested therein. The lands and buildings belonging to mines in some states are assessed as real estate, and to that extent their value may be also included in that of real estate, as herein reported, but at most the amount is not relatively great. In case the tax is levied on the product, as in several states, the real estate and improvements are not assessed for taxation, and consequently would not be embraced in any real estate values herein published."[1]

There is much to be said in criticism of this method. It is admittedly a guess and a bad one at that. The value of a mine depends solely upon the present output and the expectation in regard to the life of the mine, so far as these facts are known. It has no necessary connection with the amount of capital already expended in roads, lands, buildings, machinery, shafts, tunnels, etc. The expectation in regard to the richness and

tistics, Eighth Biennial Report, (1894). Also on a smaller scale, Plehn, General Property Tax in California, Am. Econ. Assn., *Studies* 4 : 197, Appendix D.

[1] Eleventh Census, Wealth, Debt, and Taxation, 2:8.

size of the body of ore may prove to be mistaken, but the "true value" is the commercial value to-day. For the purpose of the census no other value is admissible. Fluctuating as the commercial value may be, owing to the uncertainties of mining, it is yet the best that human agencies have been able to devise. It is the value measured as accurately as men of experience and training in such matters can measure it. The commercial value of a mine varies from day to day. So does the population of the country. But that fact does not preclude the possibility of ascertaining what it is to-day. This mistake is due to a forgetfulness of one of the elementary principles of all statistical science: "Every statistical investigation requires a limit of the time and of the space in which it is to be made." A mine or a quarry had a certain definite value June 1, 1890, which could be ascertained. The fact that it might have a different value July 1 has no bearing on the problem before us.

The same criticism bears with equal force upon the estimate of the value of railroads, which was set down at the cost of construction. The value of a railroad, June 1, 1890, can be ascertained in most cases to a cent by adding together the market value of the stocks, bonds, and other securities by which various titles to the road are transferred. The problem which the census had to solve was not that troublesome one, with which the courts are frequently vexed and over which railroad commissioners worry, namely: what shall be the capitalization upon which the government or the courts may allow a railroad to earn interest? It is not what ought to be the valuation but what is the present value?

The suggestion that the "true value" might be ascertained by capitalizing the net earnings at 5 per cent, a method which is actually applied by the census to telegraphs and telephones, canals, etc., is equally arbitrary. The value of any property is determined by a number of complex considerations affecting different items of property differently. Among the most prominent of these considerations are (1) present earnings, (2) security, (3) estimated future earnings, (4) general repute. Property belonging to corporations is especially affected by such considerations, but the present value,—the result of all such causes,—is definite and easily ascertained. If a given railroad had 10,000 shares selling June 1, 1890, in the market at $95 each, and 2,000 bonds selling the same day at $1,050 each, with no other outstanding securities, that road was worth $3,050,000. That sum represented the careful judgment of men experienced in estimating such values; a judgment made with a knowledge of all the circumstances which on that day could affect in any way the value of the property. Even supposing that the value were temporarily depressed by a false rumor, that sum and no other was the actual value of the road. The census can recognize no other. The method of capitalizing the net earnings at a certain per cent, or of finding the cost of construction, is applicable, if at all, only to property that seldom changes hands, and where the market value is not determined. It is certainly not applicable to railroad property and the like, except in very rare instances.

"Of the miscellaneous, the value of furniture and personal belongings constitutes a large portion. To arrive at the value of such property an examination was made of more than 8,000 insurance policies on contents of houses not located in large cities, and the result

showed the average value of furniture insured in such houses to be $387. The value of private carriages and tools of mechanics is not known, but it is believed that for each house in the United States there would be of furniture, tools and carriages an average amount of $400, making for the entire country a value of about $5,000,000,000."[1]

This method ought to be fairly adequate; if combined with, and checked by, that used by the tenth census, it certainly would be sufficient. That method is described as follows: "The number of families in each state was taken, and these were distributed, according to the statistics of occupation, into certain characteristic classes. The average value of the household goods, in the families of each class, was then estimated as thoughtfully as possible, item by item, the values given to the goods representing what they were worth to the owner, or what it would cost to replace them, with fair allowance for wear and tear, *not* what they would be worth to sell as second-hand goods. These results, secondly, were checked by an independent computation in which the annual product, or importation of each class of household goods, furniture, clothing, watches and jewelry, pianos and sewing-machines, etc., was taken into account, and an average 'life' in use assigned to the goods of each class. The result of this second and wholly independent computation was to afford a somewhat striking corroboration of the conclusions reached by the first method. Allowance was then made on account of the average quantity of food, fuel, and other supplies on hand for domestic use, yielding the aggregate of five thousand million dollars given to the table."[2]

[1] Eleventh Census, Wealth, Debt and Taxation, 2:8.

[2] Tenth Census, 7: 11 and 12.

It is not clear that the item "miscellaneous" covers exactly the same things in the tenth census as in the eleventh, and the fact that no increase was found is perhaps not significant. But here we have again an example of one of the worst faults of this investigation. We are not given sufficient explanation of the real significance of the figures to enable us to interpret them. In making the estimate certain definite items must have been counted. It should be stated exactly what they were, instead of concealing them under the term "miscellaneous."

Among the miscellaneous is also "included the value of public libraries and of personal property owned by the national, state, and local governments exempt from taxation, returns of which have been received at this office from every county and nearly every municipality in the country."[1] The division of some of the items between the different states is necessarily arbitrary and no criticism can justly be made of the methods used by the eleventh census in this respect.

To sum up, we have found: (1) that no logical classification of the items of wealth to be estimated was used; (2) that there are probably omissions of considerable importance; (3) that it will probably be found feasible to obtain better information concerning important subdivisions of some of the classes, for example land values; (4) that under real estate, "improvements" might be separated from land, farm lands from town lots; (5) that in only three of the eight items, (the second, fourth and fifth), including a little over 10 per cent of the total value obtained, were the methods used fairly satisfactory; (6) that in the other items, covering nearly 90 per cent of the total value reported, the methods used

[1]Eleventh Census. Wealth, Debt, and Taxation, 2 : 8.

were faulty and the results doubtful. This is especially the case with mines and quarries, railroads, telegraphs and telephones; (7) that in few cases are we given sufficient explanation to enable us to interpret the figures satisfactorily.

It has already been noted in the introductory part of this review that the estimate of the total wealth of the country in 1890 was upon an entirely different basis from that used in any previous census with the possible exception of that of 1880, and that comparisons could not, therefore, properly be instituted between the different census reports to show the increase or decrease of wealth from decade to decade. Nevertheless such comparisons were made and carried out at length. This constitutes a most serious and mischievous error.

In answer to similar criticisms upon a preliminary publication by the Census Office of such comparisons the reply was made, "that at this day any correction of the figures of true valuation for any previous census period is utterly impossible, however desirable such correction may be, the necessary information for the purpose not being procurable." [1]

The methods pursued by each census were then reviewed, and in conclusion the following warning was given:

"In comparing the report of true valuation of 1890 with like valuations of previous periods it should be borne in mind:

"First. That no statement of true valuation previous to 1890 included the value of vacant state or national land or Indian reservations.

"Second. That the true valuation for 1870 admittedly embraces certain duplications of value of personal prop-

[1] Eleventh Census. Wealth, Debt, and Taxation, 2; 9.

erty, arising from the taxation of mortgages and the realty represented by them, and that the values are inflated, owing to the depreciation of the standard then in use, requiring a corrective reduction of 20 per cent.

"Third. That for 1860 and 1850 the true valuation appears to have been made by adding to the assessor's list such an amount as would, in the opinion of the officer reporting, compensate for the undervaluations of the assessor. If such course was pursued, no property exempt from taxation or which escaped the assessor's list is included as a part of the property valued.

"These admitted differences of method pursued in reaching the figures of true valuation for the several census periods, and the temporary character of the Census Office, of themselves preclude any attempt of one census to revise the figures of a previous one; and the figures as published, if not as accurate as desired, can be accepted with safety as showing in a general way a continuous increase in the wealth of the nation, the exact proportions of which cannot be measured."[1]

It would seem that this answer to the objections is not entirely relevant, and the warnings against comparisons have practically little value in preventing false conclusions from being drawn when the census report itself carries out these inadmissible comparisons in detail.[2] It is a grand thing to have the scope of our census inquiries enlarged with each succeeding decade, but the unmodified results of enlarged investigations should not be compared with those of older and narrower investigations. In this respect the form of the report in

[1] Eleventh Census. Wealth, Debt, and Taxation, 2 : 10 and 11.

[2] *Ibid*, Table 3, p. 14, summarised in table on p. 9. See on the same subject an article by H. L. Bliss, *Journal of Political Economy*, 4: 86–93 (1895–96), where a similar criticism is advanced. The appendix to this review (pp. 411,ff.), contains a list of inadmissible comparisons.

the tenth census[1] is somewhat better. There the valuations for 1850, 1860, and 1870 are republished, with explanations of their significance, but no direct tabular comparisons are made.

Although the census of 1880 undertook to ascertain all the wealth of the country, its methods and consequently its results were different from those of the eleventh census, so that it is not wise to use these two, even, for anything save the roughest comparisons.

It is perfectly clear that the errors of the eleventh census as pointed out above make it undesirable to perpetuate its methods. Thus it remains for the twelfth census to make a fresh start and to establish a permanent and perfectly satisfactory method for ascertaining and measuring the wealth of the country. If such a method is established and continued, we shall, perhaps, in the future be able to measure our progress in material well-being.

Perhaps it is not possible to outline in all its details the method which should be adopted, but the general outlines of what should be aimed at are not difficult to state. First the exact date to which the census estimate refers should be carefully determined and, as far as possible, all valuations should be reduced so as to apply to that date. All exceptions should be clearly stated. The space limit is also to be determined. Wealth within our national boundaries alone should be included. The items of wealth should be treated as far as possible objectively. Credit instruments representing claims upon property already counted should be omitted, but all other credit instruments, such as foreign government bonds, stocks and bonds of foreign corporations, etc., might, perhaps, be properly included, if ascertain-

[1] Tenth Census, 7 : 1–15.

able. Our own government bonds, etc., may well be omitted, although in a certain sense they represent an increase of present wealth at the expense of the future. But as they form a part of another investigation, any one desiring the total present wealth of the country can make the addition for himself. Credit currency can also be safely omitted. Then a general, hypothetical, working classification should be determined according to strict logical principles and along the broadest possible lines. It may not, at first, be possible to obtain figures for all the sub-divisions which seem desirable, but it is well to indicate them. The classifications used in 1880 and 1890 were mere haphazard arrangements. It is impossible from them to tell whether all kinds of wealth are included and where any given item belongs.

The task of forming a comprehensive and elastic classification is not particularly difficult. We have, traditionally, two great classes of wealth, real estate and personal property. Every item of wealth in the world fits easily under one or the other of these.[1] Then there are three ways in which any one item in these two (or three) kinds of property may be owned. (1) It may belong to the public, that is, belong to some branch of the government or be held in trust for the public benefit.[2] (2) It may belong to a quasi-public corporation or a public service corporation. (3) It may belong to a private individual. There are no other conceivable

[1] A possible exception is water craft, steam and sailing vessels, of which we might if deemed necessary make a third class, but there can be no serious objection to including them under personal property.

[2] The test here should be whether it is legally possible for the corporation or persons holding the property in trust to alienate it or so dispose of it that a public purpose is no longer served thereby. It would include in most instances the endowment of educational and benevolent institutions. Church property, however, is generally purely private property and would seldom be included.

ways in which property can be owned than these. It is then a very simple task to outline the proper, natural, and logical classification of wealth for a national inventory.

The following rough outline of such a classification is presented by way of illustration. The details included are not intended to be complete, but rather as suggestive and explanatory.

I. Real Estate;
  A. Public:
    1. Lands:
      a. National,
      b. Commonwealth,
      c. Local,
      d. Educational and benevolent trusts.
    2. Structures and improvements of all kinds:
      a. National:
        (1.) For defense,
        (2.) For the various departments of government,
        (3.) River and harbor improvements.
      b. Commonwealth:
        (1.) For the various departments of government,
        (2.) For education,
        (3.) Public highways, canals, bridges, wharves, etc.
      c. Local:
        (1.) For general departments of government,
        (2.) For education,
        (3.) Streets, bridges, wharves, etc.,
        (4.) Public works — water, gas, electric light, street cars, irrigation works, etc.

d. Educational and benevolent trusts;
(With suitable subdivisions,—schools, colleges, universities, hospitals, asylums, etc.)

B. Public service corporations: (Railroad companies, street car companies, electric light and power companies, gas companies, water companies, irrigation companies, telegraph and telephone companies, etc.)

1. Lands necessarily used in the execution of their functions. (Land held for sale or speculation should be included under C. 1.)

2. Improvements and structures of all kinds necessary to the execution of their functions.

C. Private:

1. Lands:

a. Farm land, (by acre.)

b. Lots,

c. Mining lands and quarries, petroleum wells, etc.,

d. Submerged lands: for oyster-beds, etc.

2. Improvements:

a. On farm lands, including houses, barns and other structures, wind mills and tanks, wells, fences, drains and irrigation ditches, timber, orchard trees, bushes, vines, etc.,

b. On lots,

c. Mining and quarry structures,

d. Wharves, piers, etc.

II. Personal Property, Movables, etc.:

A. Public:

1. National:

a. Arms, ammunition, and all sorts of movables connected with the national defense,
b. Libraries, art galleries, etc.,
c. Furniture of buildings, etc.

2. Commonwealth :
(General subdivisions similar to national.)
3. Local :
(General subdivisions similar to national.)
4. Educational and benevolent :
(General subdivisions similar to national.)

B. Public Service Corporations :
1. Their franchises, patents, good will, etc.,
2. Machinery and equipment,
3. Their furniture and the like,
4. Other cash assets, (*i. e.*, not including any credit claims).

C. Private :
1. Live stock, poultry, etc., whether on or off farms,
2. Farming tools and machinery,
3. Carriages, wagons, bicycles, etc.,
4. Household furniture, paintings, books, clothing, jewelry, firearms, musical instruments, sewing machines, supplies of food, fuel, etc.,
5. Merchandise, goods and wares of dealers or producers, (including beer, wines, liquors, etc.),
6. Tools of mechanics,
7. Professional libraries,
8. Fixtures of saloons, stores, offices, and places of business, typewriters, etc,,
9. Machinery of mills, including engines, dynamos, presses, etc.,
10. Patents, copyrights, good will of business, and other intangible personal property.

D. Gold and silver coin and bullion.

III. Water craft, (unless included in II):

A. Public, including the navy.

B. Belonging to public service corporation:

C. Private:

1. Steam,
2. Sail,
3. All other.[1]

Some such classification as this, proceeding along logical and comprehensive lines, should be made. Its construction would serve several purposes. It would reveal, or call attention to, many forms of wealth not included in the tenth or eleventh census. It would suggest the clearest way of presenting the results. Every form of wealth which may be discovered should have its proper place somewhere in the classification. The precise meaning of each item could be seen at a glance. If such a classification were used, the only explanations necessary would be those applying to cases in which for some good reason items were omitted or combined with others. Finally it would be easily possible to abstract from such a table the figures which represented the items covered in any previous census for comparison with them, and there would no longer be any possible excuse for the naïve comparisons of totals representing unlike quantities.

It is not necessary that the general classification

[1]In the construction of such a complete list of all kinds of property much assistance can be obtained from the lists in use by the assessors in the different states. These lists, which have been expanded as experience demanded, are in many cases extremely comprehensive. By noting every item mentioned in any of these forms, or assessment schedules, and adding the kinds of property exempt, one could make a list of every kind of property in existence. The arrangement of these items according to some logical plan for classification, would then be a simple matter.

adopted should be rigidly followed. In many special instances it would be best to depart from it. For example, the separation of the value of the real estate of railroads from their other property is extremely difficult. The value of the right of way, the road bed, and of the rails, bridges and other structures on the right of way is largely dependent upon their connections with the system. The separation of real estate from personal property in that case would be more or less arbitrary. Here it would be sufficient to ascertain the total value. Should any one desire further details he could obtain them from other sources, such as the Report of the Interstate Commerce Commission. At the same time, if that were done, the total value of railroad property should not be classed as personal property, but should form a group by itself. But the establishment of a working classification as a means of planning the investigation, of checking the different processes, and as a general guide in the presentation of the results, is an absolute necessity.

II. ASSESSED VALUATION OF PROPERTY TAXED AND AD VALOREM TAXATION.

That part of the census of 1890 which deals with the assessment and taxation of property is much more satisfactory than that dealing with wealth. Here we have a most intricate and difficult problem treated in a manner at once clear and comprehensive. For many purposes it would have been advantageous had the limits of the investigation been extended, but within the limits set the results are nearly all that could be desired. The errors and omissions noted are few and very insignificant. The mere enumeration of them would give them a fictitious importance out of all proportion to their

weight. The reviewer's duty thus becomes mainly one of exposition. It will not be amiss, however, to discuss the extensions of the investigation which might, perhaps, be adopted in the twelfth census.

The inquiry was directed to ascertain the assessed value of taxable property and the amount of taxes levied upon that property. The importance of the inquiry arises from the fact that the taxation of property is universal in the United States. In every state and territory in the Union, without a single exception, there is some sort of an assessment, for the purpose of taxation, of a considerable portion of the property of citizens. It is nearly true that every branch of government, below the national, levies taxes upon property.[1]

[1] The only exceptions in 1890 were as follows:

In Connecticut no ad valorem tax on property for state purposes; nor for county purposes, except in three counties.

In Delaware no ad valorem tax for state pnrposes.

In Illinois one county levied no ad valorem tax on property except for schools.

In Iowa a number of townships levied no tax on property except for schools.

In Kentucky there was considerable variety in the practice of local governments: in 45 counties there were no municipal taxes on property except for schools; 14 counties levied no taxes on property except for schools; in 8 towns and 1 city there were no town or city taxes on property for schools; and in one county, no county tax for schools.

In Louisiana there were numerous irregularities in local taxation which defy classification, but which altogether are not important.

In Maine 14 plantations levied no state tax except for schools, 1 levied no state tax at all, 1 none for schools, 1 town levied no state tax at all, 1 none for schools, and 11 plantations and 1 town paid no county taxes.

In New Jersey no ad valorem tax for state purposes, except for schools.

In Pennsylvania state ad valorem taxes fell on personal property only.

In Rhode Island there are no county taxes; the county in this state is merely a judicial district for the state courts, and is not practically a government at all, so that this is an exception in form merely.

The assessed valuation is given under three headings: "total," "real estate," and "personal property." These necessarily follow the definitions given in the tax laws of the different states.[1] When several different valuations were made by different authorities that one was selected which was final or which came nearest to the true value. The purely arbitrary, occasional valuations used in some states for the apportionment of state taxes were not taken. In those cases the local valuations, more frequently revised, were taken.

Ad valorem taxation is stated under the following headings: (1) total, (2) state, (3) county and (4) municipal levy, except for schools; (5) state levy for schools and (6) county and minor divisions levy for schools.[2]

There are certain fundamental difficulties which beset the compilation and presentation of the statistics, and which complicate and largely invalidate any comparisons between different states. These difficulties arise from the differences in the revenue laws of the different states, and from the differences in fiscal prac-

In Vermont there was one town in which real estate was exempt from state taxation and one in which all personal property evaded taxation.

In Wisconsin the state tax on property is only for educational purposes and to meet the debt charges.

There are a few other exceptions which defy classification. For the most part these exceptions are due to peculiarities in the frame of local government, rather than to peculiarities in taxation. It is practically true that there is some kind of ad valorem taxation of some kinds of property in every part of the country. The universality of this method of taxation, in spite of the variety in the forms of government, is a most remarkable fact.

[1] As these vary much from state to state the sums given represent somewhat different things. This logical difficulty which cannot be altogether avoided will be discussed below.

[2] It does not appear to be feasible to segregate the levies for other than school purposes as none of them is universally separated in the public accounts.

tice. The kinds of property assessed are different in every state, or, perhaps more accurately stated, the list of exemptions is different in every state. Thus while in 1890 the California law called for the assessment and taxation of every kind of private property except growing crops, that of Illinois, to choose an example somewhat at random, exempted churches, certain property devoted to education, cemeteries, possessory claims, property devoted to purely charitable uses, free public libraries and the property of agricultural, horticultural, mechanical and philosophical societies. In other states the list of exemptions was different, sometimes longer, sometimes shorter.[1] To add together the assessed valuations of all the states is, therefore, from a certain point of view, to commit the error against which school children are warned when studying arithmetic; namely, adding unlike quantities, such as two potatoes and three apples. Not only is the legal definition of assessable or taxable property different in every state, but the practice of the states is so varied as to give a still more uncertain meaning to any figures stating the assessed valuation. The rate of assessment to the true value and the kinds of property which are actually reached or which escape vary from state to state. For example, the assessment of property in California was in 1890 at about two-thirds of the true value, in Illinois at less than one-fourth. At the same time a far larger proportion of taxable property was reached in California than in Illinois.

Of the differences due to the law the census very properly took cognizance by outlining the revenue laws

[1] The entire list of exemptions is constantly changing, generally increasing. Its growth and the variations in differents parts of the country afford a most instructive commentary on the tendencies of democracy and the forces which determine legislative action.

of each state. But little or nothing is said, directly, about the differences in practice. Some light can be had as to the rate at which the real estate is assessed by comparing the assessed value of that kind of property with the true value as given by the census in connection with the estimate of wealth. But, as we have seen, the estimate of wealth is not very satisfactory. Nothing is definitely stated as to the amount of taxable personal property which is exempt or which escapes, nor as to the rate at which the balance is assessed. From no data given by the eleventh census is it possible to ascertain these facts. The estimate of the true value of all tangible wealth is of no use in this connection. First, because not all of it is taxable, and secondly, because many things are taxable which are not tangible wealth. It is for these reasons that the reduction of the assessed valuation to a per capita rate or of ad valorem taxation to a rate on the total true valuation or on the assessed valuation has little practical value for purposes of comparison. Thus, for example, we are told that the assessed valuation of Illinois is $153.53 per capita and of California, $737.88 per capita, and, that the rate in Illinois, of all taxation, is $4.09 on each $100 of assessed valuation, and of California $1.70. We are further told that the true value of taxable real estate in Illinois was $3,108,000,000, of which the assessment was 18.85 per cent. The true value of taxable real estate in California (which we must not forget differs in some items from the kinds of real estate taxable in Illinois) is given as $515,500,000, which is assessed at about 60 per cent. That is, real estate taxed in Illinois bears a burden of about 1.06 per cent; in California, 1.24 per cent.[1] But

[1] There are quite a number of other corrections which should be

it is not possible to go any further than this in estimating the burden of ad valorem taxation. The most serious omission is that the true valuation of personal property that is exempt is not given; nor are we informed as to the amount of taxable personal property which escapes by fraudulent evasion, or the rate at which the remainder is assessed. To make the information concerning ad valorem taxation complete the next census should endeavor to ascertain the following details in addition to those given in the eleventh: (1) What part of the real estate exempt from taxation in each state is private property and what part belongs to some branch of the government?[1] (2) What part of the pe-r sonal property in each state is exempt and what part of that belongs to the government? (3) How much personal property escapes taxation by fraudulent evasion, and at what rate the balance is assessed? (4) If the estimate of wealth is, as it has been in the past, confined to tangible wealth, how much intangible wealth is assessed?[2]

In connection with the difficulties which the investigation into ad valorem taxation has to encounter, we must not overlook the lack of uniformity in the definition of real and of personal property in the different

applied before even this comparison is permissible. The distribution of railroad property between real estate and personal property is not the same in the assessed valuation as in the true valuation. In California a certain amount of unpatented land is taxed as personal property under the head of possessory claims; this is exempt in Illinois. In California all realty not belonging to some branch of the government is taxable and in Illinois a considerable amount of such realty is exempt. All things considered, it is probable that the average burden on real estate is about the same in each of these two states.

[1] The true value of all exempt real estate was estimated by the eleventh census.

[2] Should some such outline as that above suggested for the estimate of wealth find favor and be adopted, it would be comparatively easy to ascertain these items.

state revenue laws. Remarkable as it may seem, the revenue law definitions do not conform very closely to the common law distinctions nor to the accepted ideas. As a result of these differences of definition some of the most curious results are shown by the statistics presented in the last census. Thus, for example, it seems at first glance inexplicable that in the more recently settled states or territories the proportion of personal property taxed to the total amount of property taxed should be so large as it is shown to be. In Montana, Wyoming, New Mexico, Arizona, Nevada and Idaho the amount of personal property assessed exceeded that of real estate assessed. This appears to be very remarkable when we note that for the country at large the assessed valuation of personal property is only one-third that of real property and in most of the older states even less, while the census estimate of the true value of personal property is only two-thirds that of real property. The fact is that this difference is largely a matter of definition. In the states named improvements upon lands the fee to which had not yet been acquired by the settler and, except in Idaho, the value of his partially matured claim to the land were assessed as personal property.[1] The significance of this difference of definition is apparent when we notice that in these states and territories more than half of the real estate (by true value) was exempt from taxation, and that in the Western division, which includes these states, 46.6 per cent of all real estate was exempt, against less than 10 per cent in all other divisions.[2]

[1] Idaho, Illinois and Iowa exempted possessory claims.

[2] Per cent of real estate exempt from taxation, 1890. (Deduced from Table 2, Wealth, Debt and Taxation, 2 : 13.)

The United States______9.3 per cent.
North Atlantic Div.___8.7 " "

The greatest difficulty is that no two states of the Union have the same revenue system, no two of them assess property in exactly the same way, nor do they assess the same kinds of property. So that, although the general property tax does appear in every state, it appears in a great variety of forms which cannot readily be reduced to that uniformity required in statistical tables. Upon this point, and after calling attention to these and other irregularities in commonwealth taxation, Professor Seligman said in 1889: "The inference from all these facts, so far as our present purpose is concerned, is that the statistics of valuation and assessment are of exceedingly little value for purposes of comparison. If all the property, or if even all the real estate, in the commonwealths were assessed at some fixed ratio to its actual value, we would at least possess some data for comparison. But as long as each commonwealth or county appraises its property at an arbitrary rate which does not appear on the books and which differs in each instance, it is manifest that the figures afford no exact criterion of actual proportions, and that any conclusion based on the assumption of the correctness of the statistics would be utterly fallacious."[1]

South Atlantic Div.	7.1 per cent.	
North Central Div.	6.3 " "	
South Central Div.	11.1 " "	(Includes Oklahoma and Indian territory exempt.)
Western Division	46.6 per cent.	

Montana	47.4 per cent.
Wyoming	71.4 " "
New Mexico	66.7 " "
Arizona	73.4 " "
Nevada	72.6 " "
Idaho	70.3 " "

Of course, a very large portion of this was government land proper; still a large amount is in process of acquisition by private individuals.

[1] Am. Stat. Assn. *Publications*, 2; 410 (1889).

III. RECEIPTS AND EXPENDITURES OF NATIONAL AND LOCAL GOVERNMENTS.

Of the matters presented in this part of the investigation we shall consider only that referring to state and local governments, and we shall omit any consideration of municipal or city finance.

Under the head of receipts we have an outline of the monies covered into the various treasuries during the fiscal years ending in 1890. Some confusion arises from the fact that the date to which the investigation refers is not as clearly stated as it might be and that it differs from that to which the section on assessment and ad valorem taxation applies. The ad valorem taxation referred to in the first part is generally that levied on the assessment made during the year 1890, and hence was mainly for the support of the governments during the year 1891. That referred to in the second part is for the most part that which was levied on the assessment of 1889 and paid during 1890. There could be no serious objection to such changes of date as this if they were always clearly stated in some prominent place. But one fault of the eleventh census is that the date to which the statistics refer is frequently hard to find, being buried in the explanatory text, and not at all uniform.[1]

The receipts of the state and local governments are given under the following headings:

Total.

[1]In some of the tables, notably those showing the receipts and expenditures of the states in detail and of the counties in the same way, a most excellent plan is followed of introducing a column showing the exact date to which each line of figures refers. Some such plan should be carried through the whole of the work. In this respect the tenth census was superior, the explanatory text being in every case headed by a statement of the date to which the figures refer.

Ad valorem taxes on real and personal property.

Corporations separately reported:

- Banks and bankers,
- Railroads,
- Other.

Licenses:

- Liquor,
- Other.

Penal and reformatory institutions.

Income from funds and investments.

Water works and other enterprises, net.

Sale of property.

Fees, fines and penalties.

Special assessments:

- Streets and bridges,
- Sewers.

Interest on deposits.

Reimbursements and miscellaneous.

In a general way this classification is most excellent. It is certainly clear and logical. Little improvement upon it can be desired. The labor which it cost to rearrange the complex accounts of the public monies, which are kept by about as many different systems as there are separate treasuries must have been tremendous. The few tests that I have been able to apply show the work to have been done carefully and accurately. The only questions for consideration in connection with the plan of the twelfth census arise in connection with the desirability of more detail on certain points.

Ad valorem taxes on real and personal property furnished, in 1890, approximately 75 per cent of the total receipts of state and local governments. The balance was raised by special taxes and other forms of revenue cited in the above list. Many of these special sources

of revenue are of growing importance, while the general property tax is not holding quite the same position of relative importance among the different revenues which it held some years ago. It is unfortunate that the tenth census afforded no statistics from which we can measure the development of new sources of income. For this purpose it would be desirable if some of the items were given more in detail. Although the item of miscellaneous is only $27,000,000 out of a total of $584,000,000 or only 4.8 per cent, yet it embraces at once the oldest and the newest taxes in use, and some of the most interesting sources of revenue. Among other things it includes poll taxes and inheritance taxes. That the former were not segregated is remarkable in view of their age and general prevalence. But the interest in the latter is more recent than the eleventh census. In 1890, inheritance taxes existed in but five states. Between that date and the close of the legislative sessions of 1897 the older forms of the inheritance taxes have been much extended and ten other states have adopted that method of obtaining revenues.

Under taxes on "corporations separately reported" two things appear to be confused, which it would be well to keep separate. They are: (1) the taxes levied upon certain corporations as banks, and railroads, under the regular forms of and by the method of the general property tax, and (2) special taxes upon corporations according to some other plan. Thus in California a part of the taxes on railroads happen to be separately reported merely because certain forms of railroad property are assessed by the state board of equalization and not by the county assessors, a method of procedure involving no change whatever from the principles of the general property tax of which this is a part; while in

the same column we find the corporation taxes of Pennsylvania, Connecticut and other states, which are based upon entirely distinct principles and methods.[1]

In a general way it may be stated that more detail is desirable in all statements of receipts other than taxes on assessed valuation, and the meaning of the figures should be more fully explained. The headings and the columns give an artificial appearance of uniformity that is entirely lacking as a matter of fact. Taxation varies in character so much from state to state that no bald statement of figures is adequate. It is not possible to assume that many, if any, of the users of the census are sufficiently familiar with the law and practice of the different states to interpret the figures given correctly. Every table should, therefore, be accompanied by full explanations.

Of the tables concerning state expenditures little need be said. So far as they go they appear to be eminently satisfactory. The expenditures are given under the following headings:

Legislative,
Executive,
Judicial, including county courts, inquiries, and inquests,
Military,
Educational purposes and public schools,
Charitable,
Interest,
Penal and reformatory,
Buildings and sites, including care and maintenance,
Waterworks and other enterprises, net,

[1] Moreover all of the taxes on railroads in California are not separately reported, a part being included in the assessment made by the county assessors.

Salaries separately reported, fees, and commissions,
Roads, sewers, ditches, and bridges,
New buildings, works, and sites, separately reported,
Police,
Public parks and places,
Fire,
Health,
Lighting,
Miscellaneous.

The uses to which statistics of public expenditure may be put are so varied, the expenditures themselves are so complex that a strict classification is practically impossible and the broad divisions above cited are probably as satisfactory and generally useful as could be devised. Especially valuable are the tables showing the receipts and expenditures of the commonwealths for each year of the decade from 1880 to 1889. These tables are full of instruction and interest and should if possible be continued.

IV. GENERAL CONCLUSION.

While the investigations of the eleventh census into taxation are eminently satisfactory within their acknowledged limits, there is still room for considerable expansion and rearrangement before the final scheme is adopted to be continued by each census throughout the twentieth century. In the first place the point of view from which the whole investigation is conducted should be changed. In the earlier censuses the investigation into state and local taxation was made, not for its own sake at all, but as a part of an attempt to ascertain our national wealth. The same purpose to a large extent

prevailed in the eleventh census, although large sections were added which dealt with public finance merely for its own sake. It is now time that a new point of view should be chosen. The investigation should no longer be one into assessment and taxation, in which taxation is simply an after-thought and the assessment the prime object of research. We should have an investigation into taxation for its own sake; assessment will then fall into its proper place as a subordinate part of taxation. So far as the assessment throws any light upon valuation or wealth it can still be used. But as was shown in the first part of this review the light obtained from the assessment upon the true wealth of the country is very small.

The proper aim of the second part should be to ascertain the amount and character of the public revenues and expenses. This aim is of sufficient importance to justify its separate treatment. All sources of revenue should be given equal attention. The importance of the general property tax and with it of the assessment of property is gradually declining. That of other sources of revenue is increasing. Unfortunately we have no statistics of local taxation more recent than those of the census of 1890. But we have some light upon the development of commonwealth taxation, and it is fair to assume that local taxation will show the same general tendencies, although not to the same extent. In 1890, about one fourth of the revenues of the states was raised by means other than the general property tax. In 1900 the proportion so raised will be considerably greater. According to an investigation made by Dr. E. D. Durand for the New York State Library[1] covering commonwealth

[1]See Library Bulletin—Legislation, No. 8, March, 1897; State Finance Statistics, 1890 and 1895.

revenues and expenditures, the receipts from the general property tax by the commonwealth alone were about the same in 1895 as they were in 1890, while the receipts from other sources, or from special forms and applications of the general property tax, having practically the same significance as new taxes, increased about 25 per cent. That is, the entire increase in the revenues of the states was from sources other than the general property tax. These new sources of revenue should be more fully treated as their importance grows.

The eleventh census took cognizance of all sources and forms of revenue, so that this suggestion involves no fundamental change in the plan of the census. It merely calls for more emphasis on certain parts and a slight rearrangement of the items so as to show the relative importance of the different parts more accurately.

V. APPENDIX.

In the foregoing discussion several references have been made to the use by the eleventh census of inadmissible comparisons. To make the criticism more concise, it is in order to append a list of the tables which seem to offend, with the reasons for the criticism in each case. The list contains only the general tables. Many detailed statements expanding these tables are, as a matter of course, open to the same criticisms.

(1) The table in the text, page 9, first part. True valuation for each census year 1850 to 1890, inclusive: total, per capita, and increase per cent.

The comparison here drawn is inadmissible because the true valuation is of different things in each census; that is of different categories of wealth. Furthermore, the estimates were made by different methods each time,

so that the term true value has a different meaning in each case.

(2) Table 3, page 14. "Comparative summary of the true valuation of real and personal property, total and per capita, by states and territories (exclusive of Alaska): 1850 to 1890."

This table gives again the comparison just criticized and is open to the same objection.

(3) Table 5, page 16. "True valuation of real and personal property, arranged in order of amount; per capita valuation, per cent of true valuation of real estate and improvements of total valuation, assessed valuation of real and personal property taxed, and per cent of assessed valuation of true valuation, by states and territories (exclusive of Alaska): 1890."

The criticism here affects the column headed "per cent of assessed valuation of real and personal property taxed of true valuation." This column purports to give the rate of underassessments and evasion. If that is not what it was inserted for, it is meaningless and useless. But as a matter of fact it gives something very different and totally illogical. The comparison is actually between the assessed value of property taxed and the true value of all property taxable and untaxable, assessed and unassessed. It tells us neither the rate of underassessment, nor the percentage of evasion, nor the percentage of property exempt. The quantities dealt with have an entirely different quality in each state; or, in other words, the intention of the terms used varies from state to state so that comparisons are absolutely impossible.

(4) Table 1, page 59. "Summary of the total and per capita assessed valuations of real and personal property

taxed, by states and territories (exclusive of Alaska, Oklahoma, and Indian territory): 1850 to 1890."

Also the second part of the table in the text, page 9, relating to the assessed valuation of real and personal property taxed, showing the total, the per capita and the increase per cent for each census: 1850 to 1890.

The assumption made in the text (see page 11), and carried out in these tables, that the increase in the assessed valuation of real and personal property taxed shows an increase in wealth is naïve in the extreme. An increase in the assessed valuation of property, total or per capita, may mean any one of several things besides an increase in wealth. It may mean, for example, that the rate of assessment has been raised, or that property which evaded taxes has been reached. The assessment may remain stationary or increase while the amount of wealth decreases. Whatever may be the law or the assumed practice the fact remains that the assessed value is a more or less arbitrary value placed upon certain kinds of property for purposes of taxation. Its increase or decrease year by year has no relation to the true value. It is not unusual for a state board of equalization to raise the assessment of a state or of a large part of a state from 5 per cent to 20 per cent in a single year. A revision of the tax law of California in 1872 more than doubled the assessment in a single year. It would be hard to prove that the wealth of the state doubled in that one year.

The increase or decrease in the assessed valuation has a bearing on taxation. It has nothing directly to do with wealth.

(5) Table 3, page 61. "Summary of the total and per capita ad valorem taxation and the rate per $100 on the total assessed valuation, by states and territories (exclus-

ive of Alaska, Oklahoma, and Indian territory): 1860 to 1890."

Without proper reference to the other sources of revenue the increase or decrease in ad valorem taxation per capita has little significance.

The charts and maps displaying these comparisons are open to the same criticisms.

CARL C. PLEHN.

University of California.